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Molten carbonate fuel cell; Fuel cell system; Anaerobic digester gas (Krumbeck, M. (157) 902)

Gas turbine

Autothermal reforming; Hydrogen; Fuel cell; Power cycle (Lyubovsky, M. (157) 430)

GDOES

SOFCs; Fe–Cr alloy; Interconnect; Oxidation; Anode gases (Horita, T. (157) 681)

Glass–ceramic sealant

Glass–ceramic sealant; SOFC; Electrical behaviour; Electrochemical impedance spectroscopy; Thermal analysis (Lara, C. (157) 377)

Graphite

Carbon nanofiber; Carbon black; Electrochemistry; X-ray diffraction; Surface area (Takeuchi, K.J. (157) 543)

Greenhouse

Energy; Security; Technology; Innovation (Bauen, A. (157) 893)

Grinding

Multi-walled carbon nanotubes; Capacity; Chemical vapour deposition; Electrochemical properties; Lithium-ion battery (Eom, J. (157) 507)

Group-contribution method

Group-contribution method; Ionic conductivity; Solid polymer electrolyte; Debye–Hückel theory; Nernst–Einstein equation (Joo, J.H. (157) 448)

Hardware-in-the-loop

PEM fuel cell; Dynamic modelling; Test benches; Fuel cell vehicle (Vath, A. (157) 816)

Heat sources

Ultra capacitors; Thermal modeling; Thermal resistance; Temperature (Guillemet, P. (157) 630)

Heat-resistant alloys

Heat-resistant alloys; Metallic interconnects; Oxidation; Solid oxide fuel cells (Jian, L. (157) 368)

- Heat-transfer
Internal-reforming; Kinetics; Catalyst (Agnew, G.D. (157) 832)
- Heteropolyacids
MCM-41; Composite material; Proton conductor; Impedance spectroscopy (Ahmad, M.I. (157) 35)
- High voltage
ZnS nanoparticles; Thiourea hydrolysis; Electrochemical double layer capacitance; Cyclic voltammetry; Band edge bendings (Jayalakshmi, M. (157) 624)
- Humidification
PEFC; Dehydrator; Gas circulation; Aerospace; Closed environment (Sone, Y. (157) 886)
- Hybrid
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- Hybrid capacitor
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- Hybrid ICE/SOFC
Microtubular SOFC; Ether fuels; Carbon deposition on anode (Kendall, K. (157) 750)
- Hybrid vehicle
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- Hydrocarbons
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- Hydrochloric acid
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- Hydrogels
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- Hydrogen
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- Hydrogen
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- Hydrogen
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- Hydrogen
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- Hydrogen
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- Hydrogen
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- Hydrogen gas
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- Hydrogen oxidation
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- Hydrogen purification
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- ICD batteries
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- Image measurement technique
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- Impedance
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- Ionic conductivity
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- Ionic conductivity
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- Ionic liquid
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- Lead acid batteries**
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- Power cycle
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- Power generation
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- Power plant
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- Power system operating cost
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- Power train
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- Power-plant efficiency
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- Primary lithium battery
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- Proton conducting membranes
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- Proton conductivity
 Direct methanol fuel cell (DMFC); Sulfated zirconia; Water uptake retention; Nafion[®]; Composite membrane (Ren, S. (157) 724)
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- Proton exchange membrane
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- Proton exchange membrane fuel cell (PEMFC)
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- Proton exchange membrane fuel cells
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- Proton exchange membrane fuel-cell system
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- Proton-exchange membrane
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- Proton-exchange membrane fuel cell
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- Proton-exchange membrane fuel cell
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- PtSn alloy
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- PURE hydrogen
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- PVDF-PEO blends
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- Reaction
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Reflow soldering

Chip type capacitor; Ionic liquid; Electrolyte; Sparking voltage (Song, Y. (157) 610)

Reformer

Proton-exchange membrane; Fuel cell; Line-interactive uninterruptible power supply; Supercapacitor; Fuel calculation (Choi, W. (157) 311)

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Regenerative fuel cell; Electrocatalyst; Water electrolysis; Thin-film electrodes; Gas diffusion layer (Pettersson, J. (157) 28)

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PEM fuel cell; State-space modeling; Load management (Tanrioven, M. (157) 401)

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PURE hydrogen; PURE energy; Fuel cell; Sustainable; Field experience (Gazey, R. (157) 841)

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Ru catalyst

Selective CO oxidation (PROX); Methanation; Polymer electrolyte fuel cell (PEFC); Hydrogen purification (Xu, G. (157) 64)

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Selective CO oxidation (PROX)

Selective CO oxidation (PROX); Methanation; Polymer electrolyte fuel cell (PEFC); Hydrogen purification; Ru catalyst (Xu, G. (157) 64)

Separator

Solid oxide fuel cells; Sol–gel; Oxidation; Chemical structure (A Lee, E. (157) 709)

Serpentine channel flow bed

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Silver vanadium oxide

Microwave synthesis; Primary lithium battery; ICD batteries (Beninati, S. (157) 483)

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Molten carbonate fuel cell; Biomass; Energy analysis; Fluidized-bed gasifier; Power plant (Tomasi, C. (157) 765)

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Single-wall carbon nanotube; Polyaniline; Composite; Supercapacitor; Specific capacitance (Gupta, V. (157) 616)

Sintering

IT-SOFC; Cerium oxide; Nanopowder; Reaction (Mori, M. (157) 688)

 $\text{Sm}_{0.5}\text{Sr}_{0.5}\text{CoO}_3$

Solid oxide fuel cell; Cathode; Sol–gel processing (Tang, Z. (157) 385)

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Sodium tetraborate; Hydrogen gas; PEM fuel cell; Power generation (Ay, M. (157) 104)

Sodium tetraborate

Sodium tetraborate; Sodium borohydride; Hydrogen gas; PEM fuel cell; Power generation (Ay, M. (157) 104)

SOFC

Ageing; Thermal cycling; Leak rate; Mica seal; Phlogopite (Chou, Y.-S. (157) 260)

SOFC

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SOFC

Glass-ceramic sealant; Electrical behaviour; Electrochemical impedance spectroscopy; Thermal analysis (Lara, C. (157) 377)

SOFC

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SOFC

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SOFC

SOFC; Transient; Cascaded; Micro-tubular; Thermodynamic analysis (Nehter, P. (157) 325)

SOFCs

SOFCs; Fe–Cr alloy; Interconnect; Oxidation; Anode gases; GDOES (Horita, T. (157) 681)

Sol–gel

LiMn_2O_4 ; Thin-film electrode; Rechargeable lithium batteries; Diffusion coefficient (Rho, Y.H. (157) 471)

Sol–gel

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Sol–gel coating

Molten carbonate fuel cell; Anode; Surface modification; Wettability; Electrolyte reservoir; Structural stability (Youn, J.Y. (157) 121)

Sol–gel processing

Solid oxide fuel cell; Cathode; $\text{Sm}_{0.5}\text{Sr}_{0.5}\text{CoO}_3$ (Tang, Z. (157) 385)

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Solid oxide fuel cell

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Solid oxide fuel cells

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Solid oxide fuel cells

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Group-contribution method; Ionic conductivity; Debye–Hückel theory; Nernst–Einstein equation (Joo, J.H. (157) 448)

Solid polymer electrolyte

Modified perturbed hard-sphere-chain EOS; Fuel cell (Seong, J.Y. (157) 733)

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Lithium-ion battery; Cathode material; $\text{LiNi}_{1/3}\text{Mn}_{1/3}\text{Co}_{1/3}\text{O}_{2-x}\text{F}_x$; Structural and electrochemical properties (Kageyama, M. (157) 494)

Solid-oxide fuel cells

Interconnects; Yttrium; Cobalt; Coatings; Oxide formation (Qu, W. (157) 335)

Solid-state reaction

Li-ion battery; Cathode material; $\text{LiNi}_{0.5}\text{Mn}_{0.4}\text{M}_{0.1}\text{O}_2$; Electrochemical properties (Li, D. (157) 488)

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Chip type capacitor; Ionic liquid; Electrolyte; Reflow soldering (Song, Y. (157) 610)

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- Specific capacitance
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Frequency distortion; Distortion analysis; Critical stack monitoring (Ramschak, E. (157) 837)
- 5 V spinel
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- Starving operation
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- State-space modeling
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- Steam permeation
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- Sulfonated polyimide
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- Sulfonated polysulfone
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- Supercapacitor
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- Surface modification
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- Surfactant
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- Sustainable
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- System
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- Temperature distribution
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- Temperature gradient
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- Thermal cycling
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- Thin-film electrode
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- Thiourea hydrolysis
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TiO₂ film

TiO₂ film; Composite membrane; Direct methanol fuel cell; Protonic conductivity; Methanol permeability (Liu, Z. (157) 207)

Transient

SOFC; Cascaded; Micro-tubular; Thermodynamic analysis (Nehter, P. (157) 325)

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PEFC; Current-interrupted method; Current-pulse method; Degradation factor (Sugiura, K. (157) 695)

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Tungsten carbide

Direct methanol fuel cell; Tungsten trioxide; Electrooxidation; Platinum; Electrocatalyst (Ganesan, R. (157) 217)

Tungsten trioxide

Direct methanol fuel cell; Electrooxidation; Platinum; Tungsten carbide; Electrocatalyst (Ganesan, R. (157) 217)

Ultra capacitors

Ultra capacitors; Thermal modeling; Thermal resistance; Temperature; Heat sources (Guillemet, P. (157) 630)

Ultracapacitor

Supercapacitor; Porosity; surface-area; Activated carbon; Capacitance (Pandolfo, A.G. (157) 11)

Valve-regulated lead-acid

Valve-regulated lead-acid; Batteries; Carbon; Capacity; Power; Cycle-life (Moseley, P.T. (157) 3)

Vanadium

Vanadium; Li-ion battery; Hydrothermal synthesis; Nanobelts (Zhang, K.-F. (157) 528)

Vapour-phase pollution

MCFC; Volatilizing molten carbonate; Visualization; Image measurement technique (Sugiura, K. (157) 739)

Vehicle

Environment; Energy; Sustainability; Hydrogen; Fuel cell (Granovskii, M. (157) 411)

Visualization

MCFC; Volatilizing molten carbonate; Vapour-phase pollution; Image measurement technique (Sugiura, K. (157) 739)

Volatilizing molten carbonate

MCFC; Vapour-phase pollution; Visualization; Image measurement technique (Sugiura, K. (157) 739)

Wastes

Dark fermentation; Hydrogen; Biogas; Mixed culture (Gómez, X. (157) 727)

Water electrolysis

Regenerative fuel cell; Electrocatalyst; Thin-film electrodes; Gas diffusion layer (Pettersson, J. (157) 28)

Water flooding

Transparent fuel cell; Cathode electrode (Weng, F.-B. (157) 674)

Water management

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Direct methanol fuel cell (DMFC); Sulfated zirconia; Proton conductivity; Nafion®; Composite membrane (Ren, S. (157) 724)

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X-ray diffraction

Carbon nanofiber; Carbon black; Graphite; Electrochemistry; Surface area (Takeuchi, K.J. (157) 543)

Yttrium

Interconnects; Cobalt; Coatings; Solid-oxide fuel cells; Oxide formation (Qu, W. (157) 335)

ZEBRA battery

Intermediate temperature solid oxide fuel cell; Hybrid vehicle (Brett, D.J.L. (157) 782)

Zinc

PEG DiAcid; Corrosion; Inhibitors; Zinc–air cells; Analog and GSM (Cohen-Hyams, T. (157) 584)

Zinc–air cells

PEG DiAcid; Zinc; Corrosion; Inhibitors; Analog and GSM (Cohen-Hyams, T. (157) 584)

ZnS nanoparticles

ZnS nanoparticles; Thiourea hydrolysis; Electrochemical double layer capacitance; Cyclic voltammetry; High voltage; Band edge bendings (Jayalakshmi, M. (157) 624)